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August 19, 1998

Via Federal Express

Ms. Nancy Crowe
Regulatory Policy Division
Office of Exporter Services
Bureau of Export Administration
Room 2705
14th Street and Pennsylvania Ave., N.W.
Washington, D.C. 20230

Re: Proposed Chemical Weapons Convention Regulations
64 Federal Register 39194 (July 21, 1999)

Dear Ms. Crowe:

Georgia Gulf Corporation ("Georgia Gulf") appreciates the opportunity to comment on the proposed regulations implementing the Chemical Weapons Convention. Georgia Gulf generally supports the proposed regulations. However, we wish to call to your attention a factual situation that may not have been contemplated by the Department of Commerce or other agencies in developing the proposed regulations. In short, the regulations need to take into account the possibility of Schedule 1 chemicals that are produced as an inadvertent byproduct and appear as minute quantities in a mixture.

Georgia Gulf manufactures vinyl chloride monomer ("VCM") at a facility in Plaquemine, Louisiana. In 1996, Georgia Gulf discovered that our VCM unit contained a byproduct that included tris (2-chloroethyl) amine (hereinafter "tris" and also known as HN3 or nitrogen mustard). Georgia Gulf has been working diligently to reduce or eliminate this byproduct from the process. Until we can eliminate the inadvertent formation of the tris, levels of free base tris in the reactor liquid are maintained in the parts per billion range.

The Chemical Weapons Convention, Article II.8(b)(ii), expressly provides an exclusion from the definition of "chemical weapons production facility" for unavoidable byproducts of activities for peaceful purposes, so long as the chemical does not exceed 3 per cent of the total product and the facility is subject to declaration and inspection. Georgia Gulf is willing to provide the declaration

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forms and to submit to inspections as provided in the proposed regulations if deemed appropriate. We request, however, that the regulations expressly provide that approval will not be withheld under Section 712.2(e) of the proposed regulations when Schedule 1 chemicals are present as byproducts not exceeding 3 per cent of the total product.

We provide below some additional details of the factual circumstances and then discuss the proposed regulations.

Discovery of Schedule 1 Substances in VCM Production

Vinyl chloride monomer is used to manufacture a form of plastic, polyvinyl chloride (PVC). PVC has many common uses, for example the white "PVC" piping that replaced lead pipes in our homes. Georgia Gulf produces vinyl chloride monomer, along with a number of other chemicals, at our plant in Louisiana. The primary ingredient for the VCM process is ethylene dichloride, or EDC. To make EDC, we react chlorine and ethylene in a large reactor vessel.

In late 1996, Georgia Gulf discovered the presence of tris in its process. Subsequent investigation has shown that the tris forms a complex identified as tris (2-chloroethyl) ammonium tetrachloroferrate. This "triple salt" complex consists of a molecule of tris, a molecule of ferric chloride (which is used as a reaction inhibitor in our process), and a molecule of hydrochloric acid (a byproduct of the normal EDC reaction). The triple salt may be a Schedule 2 chemical, although it occurs at levels well under the reporting thresholds. However, there is some free base tris, a listed Schedule 1 chemical, present in solution in the reactor.

A team of outside experts and Georgia Gulf's own staff are determinedly attempting to identify the cause of the ongoing formation of tris and to eliminate the formation. We believe that we are honing in on contributing factors, but at this time cannot say definitively when the tris will be eliminated from the process.

We are now managing the process to prevent the triple salt from exceeding approximately 800-1,000 ppm. When the concentration reaches this level, we stop the process, boil down the reactor liquid and route it to a permitted hazardous waste tank. The reactor waste is sent to Rhodia, a licensed waste

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disposal facility, for incineration with a 99.9999% Destruction Removal Efficiency. Concentrations of tris in the reactor liquid being disposed of as waste are generally less than 2,000 ppm, or 0.2%.

Chemical Weapons Convention and Proposed Regulations

Georgia Gulf's Plaquemine facility is not a "chemical weapons production facility" within the meaning of the Convention. Facilities that produce listed Schedule 1 chemicals (including tris) are expressly excluded from the definition of "chemical weapons production facility" if the chemical is "produced as an unavoidable by-product of activities for purposes not prohibited under [the Convention], provided that the chemical does not exceed 3 per cent of the total product and that the facility is subject to declaration and inspection under the [Verification Annex to the Convention]." Convention Art. II.8(b). The tris that is present at Georgia Gulf's facility is clearly an unavoidable by-product, and Georgia Gulf is not producing any product that contains more than 3 per cent tris. Thus, the Convention will not call for shutting down the Georgia Gulf facility as a chemical weapons production facility, and approval should not be withheld under the regulations. (The proposed regulations are silent as to when the Commerce Department would approve or disapprove declared Schedule 1 facilities under Section 712.2(e).)

Indeed, the trace quantities of tris inadvertently created in the VCM process fall outside the definition of "chemical weapon," because they are "intended for purposes not prohibited under [the Convention], as long as the types and quantities are consistent with such purposes" Article II.1(a). Relevant purposes that are not prohibited include "industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes." Art. II.9. Georgia Gulf's purpose is the peaceful industrial manufacture of EDC and VCM, not the manufacture of chemical weapons, and the type and quantity of material are wholly consistent with this lawful purpose.

Georgia Gulf therefore requests that the Bureau recognize expressly in the final regulations that approval under Section 712.2(e) will not be withheld from Schedule 1 production facilities that "produce" Schedule 1 substances as byproducts at less than 3%. Indeed, the Bureau may wish to consider providing a definition of "produce" in the regulations that excludes byproducts. The definition of byproducts would be comparable to that provided in the proposed regulations


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for discrete organic chemicals, *i.e.*, substances produced coincidentally as byproducts of a manufacturing, production or waste treatment process that are not isolated or captured for use or sale as a specific end product and are routed to a waste stream. (See proposed Supplement No. 1 to Part 715, 64 Fed. Reg. at 39215.)

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Safety is a paramount concern to Georgia Gulf. Georgia Gulf would be pleased to meet with you and your staff to respond to any questions or to provide more information that might assist you in finalizing the regulations and implementing the Convention. Please feel free to contact me at 770/395-4574 with any questions.

Sincerely,



Micheline A. Johnson
Attorney